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United States Patent [19]

Fujii et al.

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[45] Date of Patent: **Apr. 27, 1999**

[54] **DECODER FOR COMPRESSED AND MULTIPLEXED VIDEO AND AUDIO DATA**

5,668,601	9/1997	Okada et al.	348/423
5,677,980	10/1997	Naoe	348/384
5,719,646	2/1998	Kikuchi et al.	348/466

[75] Inventors: **Yukio Fujii**, Yokohama; **Masuo Oku**, Kamakura, both of Japan

FOREIGN PATENT DOCUMENTS

[73] Assignee: **Hitachi, Ltd.**, Tokyo, Japan

0679028A2	10/1995	European Pat. Off.	H04N 7/64
0679035A2	10/1995	European Pat. Off.	H04N 7/64

[21] Appl. No.: **08/622,622**

OTHER PUBLICATIONS

[22] Filed: **Mar. 27, 1996**

P. Stamminitz, et al, "Hardware Implementation of the Transport Stream Demultiplexer for the ^HDTV_T Demonstrator", *Signal Processing of HDTV, VI., Proceedings of the Int'l Workshop on HDTV*, 1995, pp. 435-441.

[30] **Foreign Application Priority Data**

Mar. 29, 1995	[JP]	Japan	7-071131
Mar. 29, 1995	[JP]	Japan	7-071132

van den Hurk, et al, "A Concept for Source Decoding in Digital Video Broadcast Applications", *Int'l Conference on Consumer Electronics—Digest of Techni Papers*, Jun. 7-9, 1995, Conf. No. 14, IEEE, pp. 260-261.

[51] **Int. Cl.⁶** **H04N 7/12**

[52] **U.S. Cl.** **370/464; 348/423; 348/10**

[58] **Field of Search** 348/423, 467, 348/385, 382, 7, 10, 714; 370/389, 464, 522, 503, 428, 457, 509, 535, 536, 537

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Attorney, Agent, or Firm—Antonelli, Terry, Stout & Kraus, LLP

[56] References Cited

U.S. PATENT DOCUMENTS

5,475,688	12/1995	Bridgewater et al.	370/94.1
5,475,754	12/1995	Bridgewater et al.	380/20
5,521,918	5/1996	Kim	348/423
5,521,979	5/1996	Deiss	380/20
5,559,999	9/1996	Maturi et al.	370/389
5,613,003	3/1997	Bridgewater et al.	380/20
5,635,979	6/1997	Kostreski et al.	455/4.2
5,649,029	7/1997	Galbi	382/233
5,666,293	9/1997	Metz et al.	348/10

[57] ABSTRACT

An apparatus for filtering TS packets multiplexed with a plurality of programs and sending the filtered packets to decoders. A packet landing buffer is provided in a RAM used for a microprocessor for system control. After a channel is selected, the microprocessor filters video and audio data and performs a value added service process.

38 Claims, 23 Drawing Sheets

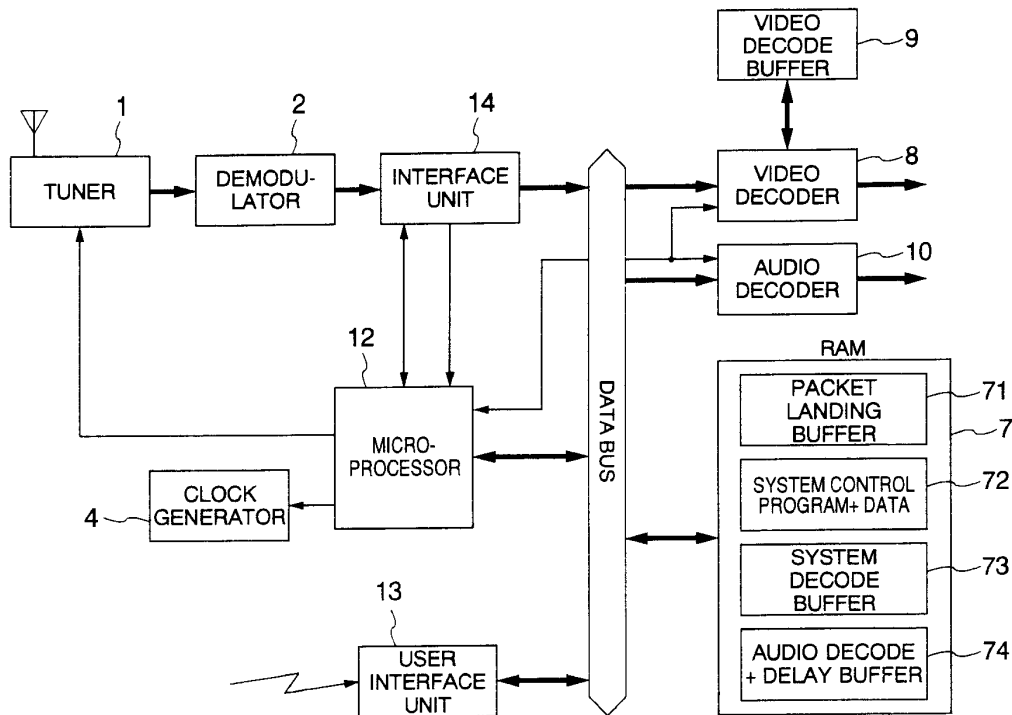


FIG.1

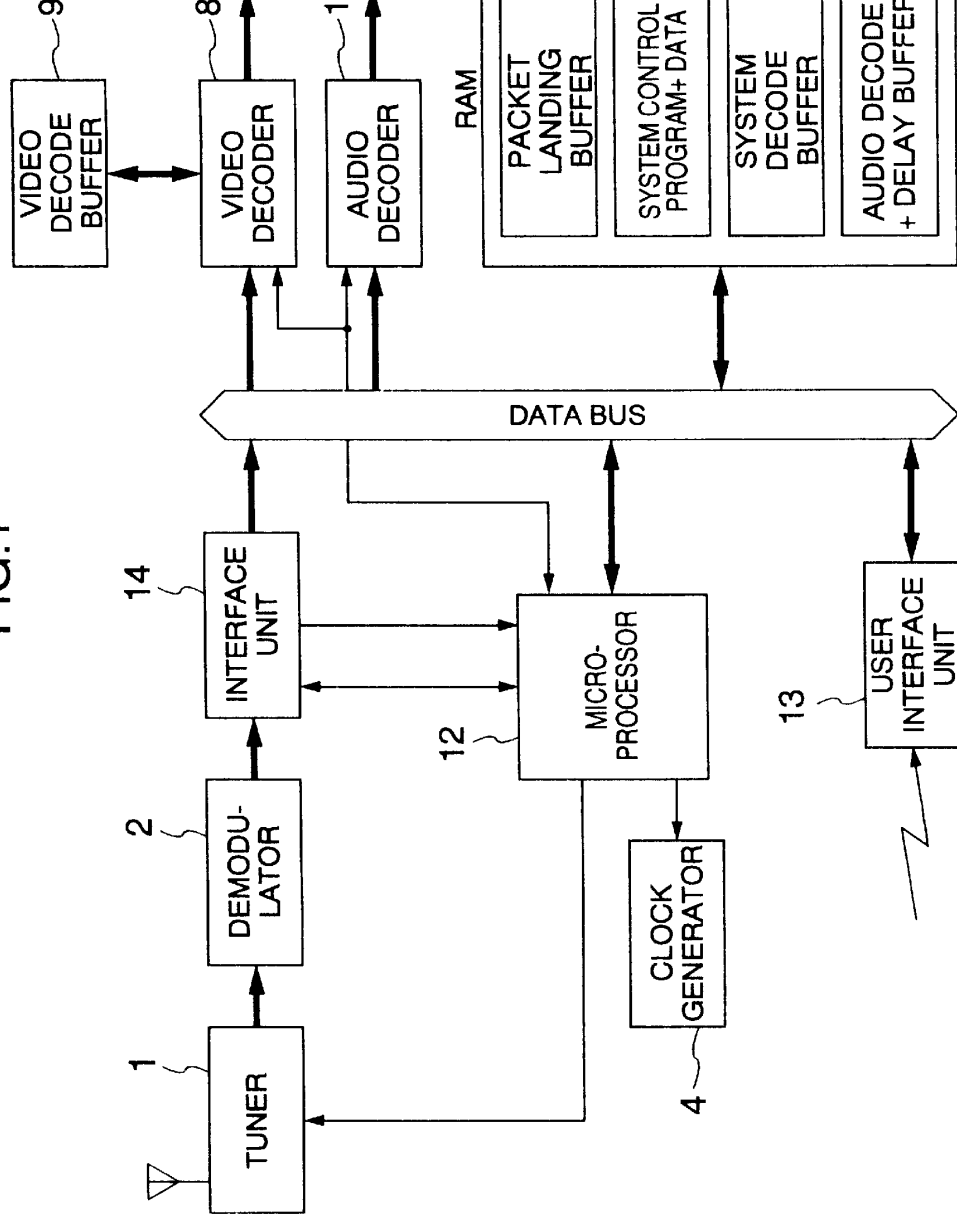


FIG.2

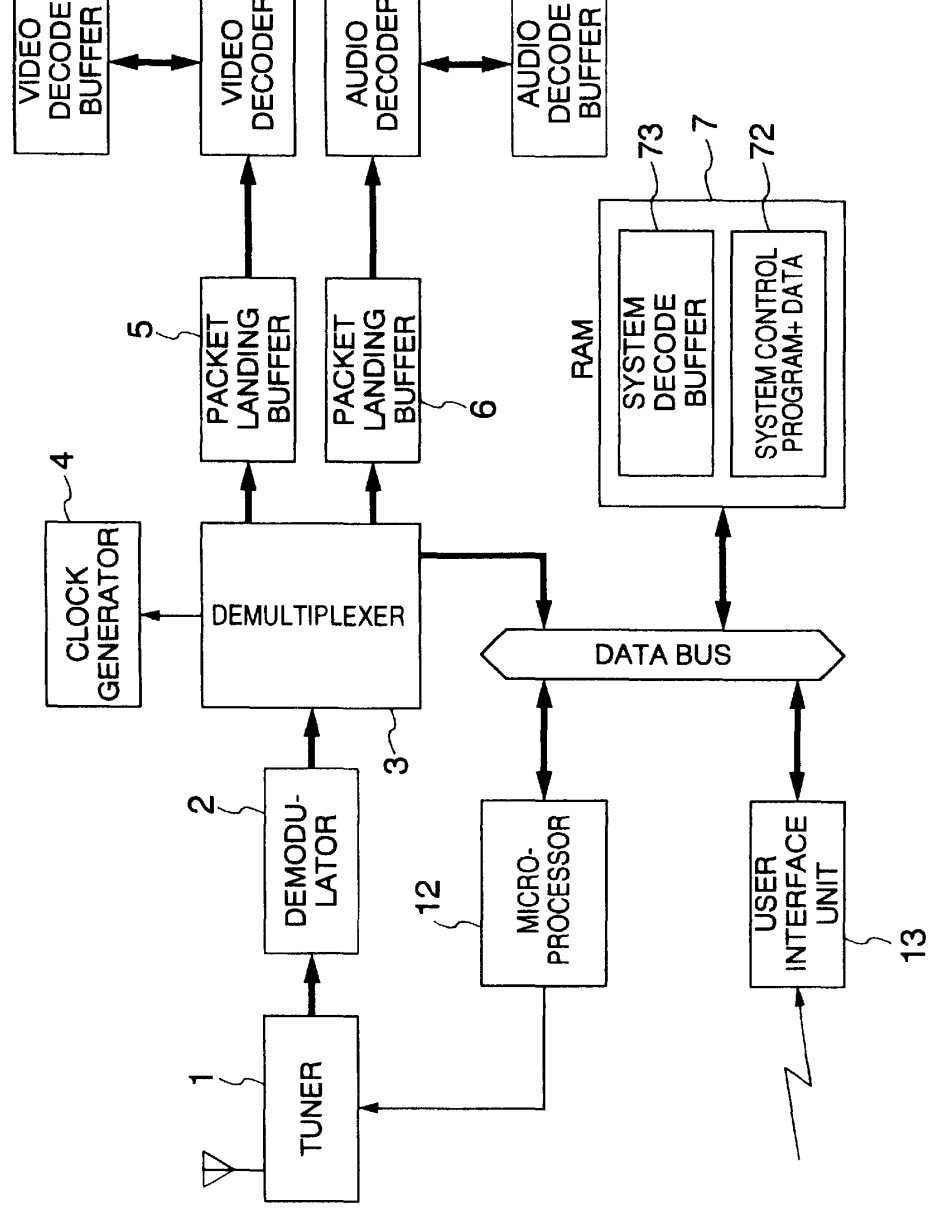


FIG.3A

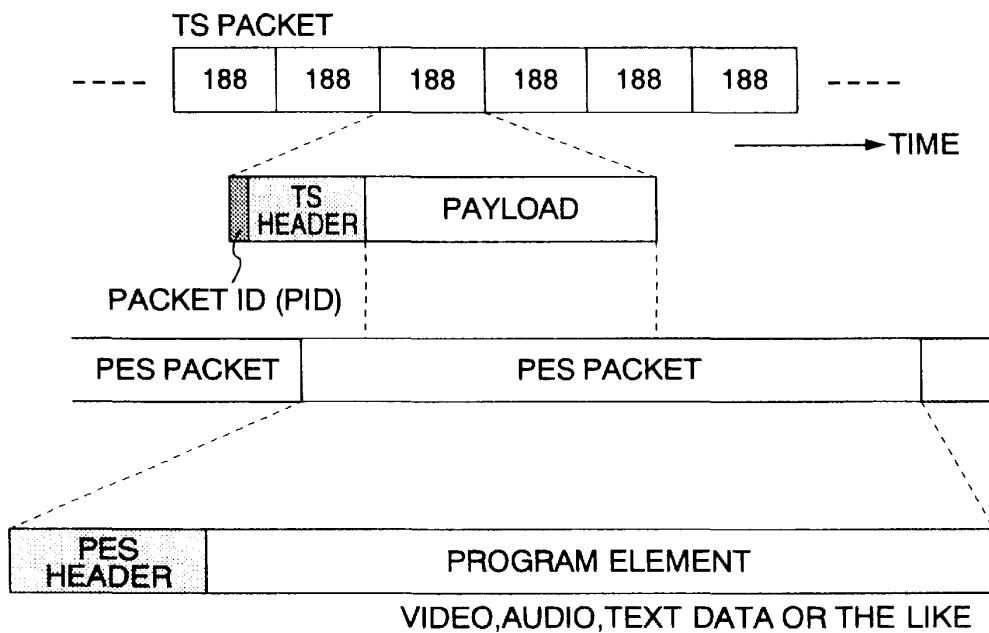


FIG.3B

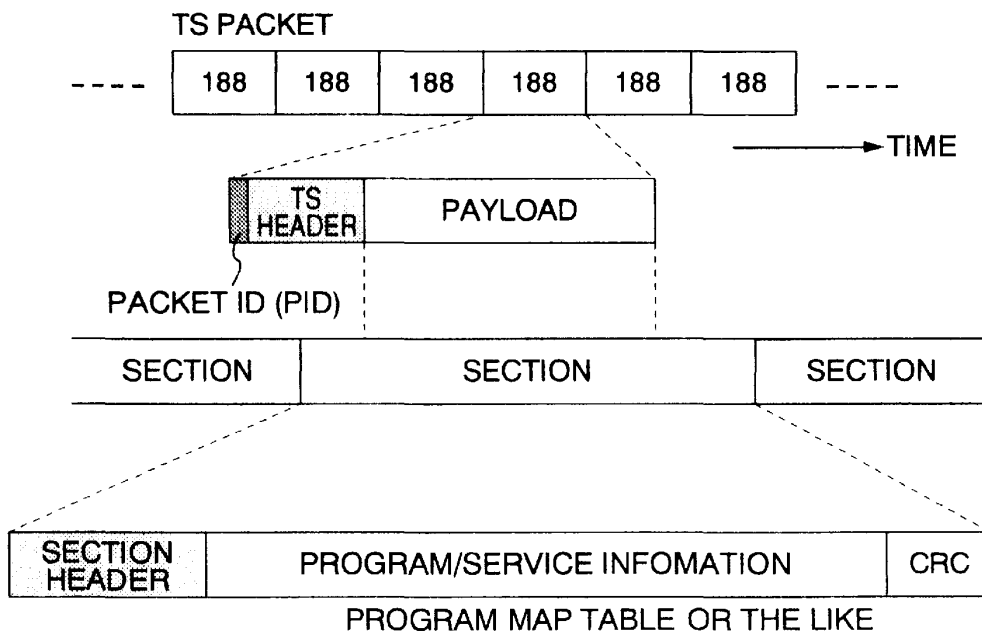
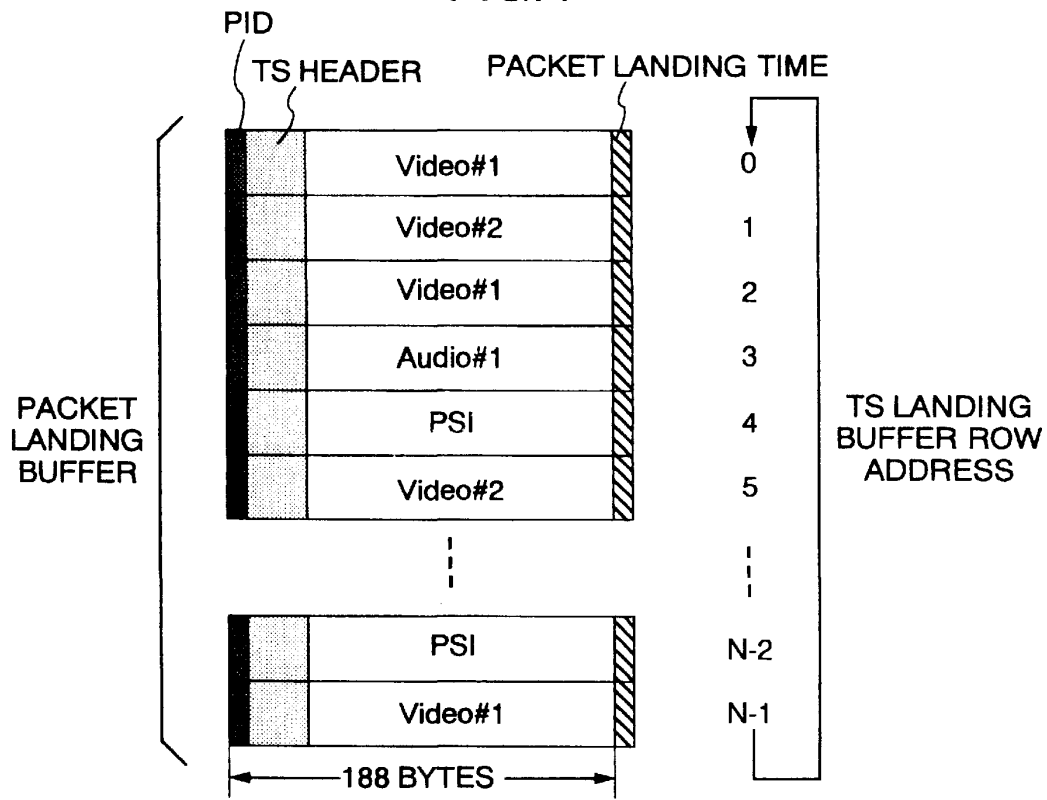


FIG. 4



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